## CHARACTERS OF TWO NORTH AMERICAN CHERMIDÆ\*

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## Kuwayama lavateræ Van Duzee, new species

Aspect of *Trioza nigrella* Crawf. but readily distinguished by its having the frontal cones reduced to pale tubercles; males largely black, females pale; first tergal segment with a white apical margin, usually conspicuous. Length 3.4-3.5 mm.

Head obviously narrower than mesothorax; vertex flat, median impressed line and basal fovea either side distinct; margins tumidly elevated; apical emargination very feeble; frontal cones reduced to a pale tumid lobe at base of antennæ; clypeus prominent, rounded-conical; antennæ longer than width of thorax; præscutum prominently narrowed and subtubercular before, about as in nigrella. Fore wings rounded-angular at apex, rather more angled in female. Male forceps slender, acute and incurved at tip and approximate under apex of anal valve, the latter abruptly contracted below at base, then slightly narrowed to apex, taken together longer than wide, when seen from above. Female segment very short, not attaining apex of anal valve.

Color: Male mostly black; edge of vertex, antennæ, frontal cones, clypeus, lateral tubercle of pronotum, some marks at base of wings, hind margin of tergal segments one and six and legs, whitish; apical segment of antennæ, tips of four preceding and base of first, and the hind femora, except apex, black; anterior and intermediate femora with a brown cloud above; tarsal claws black; wings clear, veins pale, the marginal scarcely darker. Sometimes the mesonotum shows four longitudinal vittæ and there may be one on the præscutum. Female paler, yellowish fulvous to brown, more or less varied with darker; antennæ as in male; oviduct black.

Described from numerous examples taken with the young on leaves of Lavatera assurgentiflora in San Francisco, November 28, 1918. It is common on this shrubby mallow and often disfigures the plants by causing the leaves to curl. The extent of the markings in both male and female is subject to much variation. It is nearest to Kuwayama dorsalis Crawf. but distinct in several characters.

Holotype, male, No. 1592, and allotype, female, No. 1593, Museum of the California Academy of Sciences.

Type locality, San Francisco, California.

## Aphalara martini Van Duzee, new species

Allied to *pulchella* Crawf, but smaller and darker with more uniformly dotted wings and different genital characters. Length 2.5 mm.

<sup>\*</sup>Contributions from the California Academy of Sciences, No. 233.

Head nearly as wide as mesonotum; vertex less produced either side the frontal ocellus, the surface elevated either side the incised median line; clypeus more prominently conical; præscutum shorter and more broadly rounded behind; elytra narrower; cubitus more gradually bent to costa leaving the inner apical cell narrower and more pointed at apex; outer apical cell narrower. Genital segment of female short, shorter than the apical two ventral segments together. Forceps of male clavate with an incurved apical tooth; ventral member of anal valve slender, enclosing the forceps; viewed below with a blunt tooth at about their middle; dorsal member erect, short, stout.

Color of male brown varied with lighter, the light marks including a median area on vertex, six spots on pronotum, a median spot on præscutum and about six vittæ on mesonotum; metasternal tubercles and usually the hind edge of ventral segments pale; antennæ pale, black at apex; knees and most of tibiæ and tarsi pale; elytra whitish opaque, veins yellowish, surface rather sparsely but almost uniformly dotted with fuscous; apical veins more or less conspicuously bordered with fuscous; usually with a distinct fuscous cloud on Cu<sup>2</sup> and at apex of Rs (teste Crawford fig. 395, 1914) but these do not join to form a transverse vitta as in *pulchella*. Female similarly marked but the colors paler in all parts; the genital pieces black as are the male forceps.

Described from numerous specimens taken by Mr. J. O. Martin and myself, in great numbers on Frankenia grandifolia on the salt-marshes near the mouth of the San Joaquin River at Pittsburg, California, November 25, 1923. I take pleasure in naming this species for one of our local coleopterists who has discovered a number of new and interesting Hemiptera while collecting beetles, and who first brought this species to my attention. At Lake Elsinore, in April, 1920, I took an Aphalara that seems to differ from this only in being pale throughout, and may prove to be the summer form of this species. In Crawford's key of 1914 the present species runs to pulchella from which the smaller size, short female genital segment, different wing picture and other characters mentioned will separate it.

Holotype, male, No. 1594, and allotype, female, No. 1595, Museum of the California Academy of Sciences.

Type locality, Pittsburg, California.